

## MINNESOTA RIVER BASIN--Continued

05301000 MINNESOTA RIVER NEAR LAC QUI PARLE, MN

LOCATION.--Lat 45°01'17", long 95°52'05", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.24, T.118 N., R.42 W., Chippewa County, Hydrologic Unit 07020004, on left bank 200 ft downstream from highway bridge and dam, 2.4 mi northeast of city of Lac Qui Parle, and 3.5 mi west of city of Watson.

DRAINAGE AREA.--4,050 mi<sup>2</sup> (approximately).

PERIOD OF RECORD.--October 1942 to September 1994, October 1998 to present.

REVISED RECORDS.--WDR MN-91-2; 1979

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above sea level (NGVD or 1929, levels by U.S. Army Corps of Engineers). Prior to Nov. 10, 1944, at datum 0.20 ft. lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Part of flow from 2,050 mi<sup>2</sup>, of Chippewa River Basin at most times diverted into Minnesota River above station. Some regulation by Big Stone Lake since Apr. 17, 1937, Lac qui Parle since Jan. 1938, Marsh Lake since Nov. 1, 1939, and Odessa Dam since May 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 1997 reached a discharge of approximately 43,000 ft<sup>3</sup>/s, combination of measured flow through dam and indirect computation of flow over dam; peak stage occurred Apr. 7, 1997 (from U.S. Army Corps of Engineers).

DISCHARGE - TAILWATER, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	286	372	e421	318	e731	1630	2140	1160	979	742	497
2	190	293	e383	420	319	736	2020	1950	1030	604	568	497
3	231	302	512	408	308	730	2350	1620	919	695	449	497
4	230	305	635	359	316	645	2600	1280	642	927	520	394
5	231	298	700	303	301	481	2840	1260	606	892	810	261
6	225	276	771	278	289	472	3040	1260	674	794	926	222
7	222	299	739	270	288	487	3110	1260	719	810	925	222
8	223	315	646	250	287	541	3150	1380	762	730	822	224
9	238	263	654	247	278	562	3150	1680	766	556	578	225
10	289	254	581	244	274	e570	3130	1820	738	548	331	172
11	298	255	524	247	277	571	3090	1960	710	576	328	99
12	326	256	515	244	267	570	3010	2070	713	588	331	69
13	316	256	520	246	273	563	2860	2090	713	593	314	69
14	320	251	527	244	271	561	2760	2120	714	516	416	69
15	322	244	532	267	270	611	2680	2190	711	414	382	71
16	322	242	522	306	270	665	2510	2200	709	337	295	71
17	336	252	526	366	278	662	2360	2040	599	567	116	71
18	331	282	519	437	276	648	2350	1820	458	716	61	71
19	296	265	519	485	290	618	2350	1680	428	552	54	71
20	253	255	517	487	329	603	2290	1600	376	441	41	71
21	254	258	525	486	480	521	2200	1450	386	442	438	72
22	242	258	515	456	640	468	2060	1310	529	531	678	72
23	206	258	e513	363	733	467	1700	1190	900	718	879	76
24	219	323	e510	318	738	466	1480	1200	1390	859	1050	72
25	286	375	e510	319	737	468	1320	1200	1830	902	1050	72
26	208	485	e476	316	e733	468	1310	1210	2050	867	928	72
27	183	740	e462	308	e733	470	1310	1330	1900	866	541	72
28	186	703	e463	309	e733	465	1320	1480	1590	863	290	72
29	204	681	e463	313	---	711	1570	1350	1290	863	397	72
30	245	540	e452	318	---	1150	2130	1220	1240	860	498	72
31	284	---	e422	319	---	1230	---	1210	---	858	498	---
TOTAL	7847	10070	16525	10354	11306	18911	69680	49570	27252	21464	16256	4667
MEAN	253.1	335.7	533.1	334.0	403.8	610.0	2323	1599	908.4	692.4	524.4	155.6
MAX	336	740	771	487	738	1230	3150	2200	2050	979	1050	497
MIN	131	242	372	244	267	465	1310	1190	376	337	41	69
AC-FT	15560	19970	32780	20540	22430	37510	138200	98320	54050	42570	32240	9260
CFSM	0.06	0.08	0.13	0.08	0.10	0.15	0.57	0.39	0.22	0.17	0.13	0.04
IN.	0.07	0.09	0.15	0.10	0.10	0.17	0.64	0.46	0.25	0.20	0.15	0.04

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	271.7	287.4	232.7	156.9	191.2	844.1	2759	1454	1174	986.0	532.5	266.8
MAX	2924	2327	1204	574	644	4599	14580	5837	4229	7024	6012	2402
(WY)	1987	1985	1985	1987	1999	1994	2001	2001	1984	1993	1993	1986
MIN	4.16	0.46	0.17	0.19	0.094	46.5	151	122	29.5	14.7	11.8	5.59
(WY)	1977	1977	1977	1977	1977	1956	1961	1959	1988	1988	1974	1967

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1943 - 2002
ANNUAL TOTAL	855486	263902	
ANNUAL MEAN	2344	723.0	763.3
HIGHEST ANNUAL MEAN			2507
LOWEST ANNUAL MEAN			75.7
HIGHEST DAILY MEAN	29800	Apr 14	29800
LOWEST DAILY MEAN	104	Jan 3	0.00a
ANNUAL SEVEN-DAY MINIMUM	123	Jan 1	0.00
MAXIMUM PEAK FLOW			30100
MAXIMUM PEAK STAGE			40.05
INSTANTANEOUS LOW FLOW			0.00a
ANNUAL RUNOFF (AC-FT)	1697000	523400	553000
ANNUAL RUNOFF (CFSM)	0.58	0.18	0.19
ANNUAL RUNOFF (INCHES)	7.86	2.42	2.56
10 PERCENT EXCEEDS	5770	1750	1840
50 PERCENT EXCEEDS	392	510	232
90 PERCENT EXCEEDS	159	223	27

a Many days, several years.  
 b Result of regulation.  
 e Estimated.

